

Description

[Tabletop Game with Clear Sideboards]

BACKGROUND OF INVENTION

- [0001] CROSS REFERENCE TO RELATED APPLICATION: This patent application is related to United States Design Patent application 29/186,526, filed July 16, 2003, now Design Patent D490,476, and claims priority to United States Provisional Application 60/488,074, filed July 16, 2003, incorporated herein by reference.
- [0002] FIELD OF THE INVENTION: The present invention relates to tabletop games and, more particularly, to tabletop games with clear sideboards.
- [0003] Many arcade style tabletop games exists. Some of the more popular arcade style tabletop games simulate hockey, such as for example, table hockey games, which simulates regulation hockey having movable players and goalies, and AIR HOCKEY games, or soccer (or football as it is known outside of the United States). These games typically comprise a tabletop playing field that simulates the field and typically players of the actual game, although

AIR HOCKEY games do not have representative players. While the below application refers to table hockey games, one of ordinary skill in the art will recognize other table-top games can be substituted, such as, for example, AIR HOCKEY, foosball, tabletop baseball, tabletop football, tabletop basketball, tabletop bowling, and the like.

[0004] A table hockey game includes representative forwards and defensemen for the game (typically five men) suspended over a hockey rink simulation by slidable, rotatable rods. The rods generally slide parallel to the length of the playing field to allow movement of the players along a track. The rods rotate to spin the players to provide shooting, passing, and a checking simulation. The goalie rod is slightly different than the general rods in that the rod generally slides perpendicular to the length of the playing surface to simulate the goalie moving side to side across the goalmouth. Some limited parallel movement may be allowable by pushing and pulling the goalie rod. Of course, other games may have different, but still conventional, player arrangements.

[0005] While generally enjoyable, the flow of many tabletop games is impaired because low sidewalls allow game pieces to easily exit the playing field. United States Patent

Number 6,409,169, titled Table Hockey Apparatus, issued June 25, 2002, to Sutter, shows one sample of a tabletop hockey game with low sidewalls, incorporated herein by reference. To counter this problem, the low sidewalls could be extended, but the solid, opaque nature of the sidewalls would cause large increases manufacturing and shipping costs as well as obstructing the player's view of the playing field.

[0006] Alternative to extending the sidewalls, some games use transparent covers or domes. United States Patent Number 4,480,833, titled Amusement Game, issued November 6, 1984, to Barcelow et al, shows one sample of a domed tabletop hockey game, incorporated herein by reference. The domes provide increase game flow because the game piece is inhibited from leaving the playing field, but the clear, curved dome obstructs the playing field. In particular, the curved dome reflects the overhead or general room lighting making it difficult to view the playing field. The reflection is increased as the overhead or area light increases. Moreover, the dome causes distortion when attempting to view the overhead scoreboard, which simulates authentic NHL hockey rinks.

[0007] As one of skill in the art will recognize, the dome could be

converted for use with only a limited number of other tabletop games, such as, foosball, tabletop baseball, tabletop basketball, and the like, but would still suffer from the same drawbacks. Also, the dome is not useable with some tabletop games, such as AIR HOCKEY, tabletop bowling, and the like, because the players need access to the playing field.

SUMMARY OF INVENTION

[0008] To attain the advantages and in accordance with the purpose of the invention, as embodied and broadly described herein, tabletop games with clear sideboards are provided. In particular, the tabletop games have substantially straight clear extensions. The extensions inhibit the game piece from leaving the playing field, provide views of the playing field and scoreboards without distortion.

[0009] The foregoing and other features, utilities and advantages of the invention will be apparent from the following more particular description of a preferred embodiment of the invention as illustrated in the accompanying drawings.

BRIEF DESCRIPTION OF DRAWINGS

[0010] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate em-

bodiments of the present invention, and together with the description, serve to explain the principles thereof. Like items in the drawings are referred to using the same numerical reference.

- [0011] FIG. 1 shows a front perspective view of a table hockey game illustrative of the present invention;
- [0012] FIG. 2 shows a front perspective view of the overhead scoreboard of FIG. 1;
- [0013] FIG. 3 shows a top plan view of one of the goals of FIG. 1; and
- [0014] FIG. 4 shows a functional block diagram of the goal lamp illumination system.

DETAILED DESCRIPTION

- [0015] The present invention will be explained with reference to FIGS. 1–4. While the present invention is explained with reference to a table hockey game, one of skill in the art will recognize on reading the disclosure that other tabletop games, such as AIR HOCKEY, tabletop foosball, tabletop baseball, tabletop football, tabletop basketball games, tabletop bowling, and the like could employ the present invention as well.
- [0016] FIG. 1 shows a front perspective view of a table hockey game 100. Table hockey game includes a stand 102 and a

playing surface 104. Playing surface 104 has a length L and a width W. Suspended above playing surface 104 are a number of representative hockey players 106. Stand 102 has a plurality of legs 108, and a stand base 110. Optionally, a plurality of stand sidewalls 112 may extend up from stand base 110 to slightly beyond playing surface 104. Thus, a top portion 114 of stand sidewalls may comprise a small opaque sidewall for the playing surface as desired. Alternatively and also optionally, top portion 114 could be replaced by separate a separate sidewall that resided around playing surface 104.

[0017] An open space, not specifically shown, exists between playing surface 104 and base 110 to house player control and electronics. The player controls and electronics, which will be described in more detail below as they relate specifically to the present invention, are generally known in the art and will not be further explained herein. Sample player controls and scoring controls are shown in the "833 Patent and the "169 Patent incorporated by reference above. Rods 116 extend from stand sidewalls 112 to allow a player to control representative players 106.

[0018] Attached to about playing surface 104 is a clear sideboard extension 118. Sideboard extension 118 is made of a

translucent material, such as clear plastic or glass, but the material could be colored as desired. Sideboard extensions are shown, and preferably, allow for completely clear sideboards around playing surface 104, but sideboard extensions 118 could be made in a plurality of sections connected by opaque connectors 120, such as plastic, wood, or the like. For example, the corner sections of the sideboards could be opaque connectors 120. Sideboard extensions can encompass playing surface 104 as shown, or only reside at select positions to allow access to playing surface 104. For example, for AIR HOCKEY, sideboard extensions 118 may only reside along the length L of playing surface 104 and not along the width W of playing surface 104 to allow player access to playing surface 104. Sideboard extensions 118 are substantially perpendicular to playing surface 104 and define opening 122 above playing surface 104. By having opening 122 instead of the conventional dome, the player's vision is less obstructed. Further, opening 120 cannot reflect light similar to conventional domes. Also, sideboard extensions 118 being relatively straight (and/or flat) instead of curved like conventional domes, tends to provide less glare even if playing surface is viewed through sideboard extensions

118. Lastly, sideboard extensions simulate actual hockey rinks. In particular, NHL hockey rinks contain an ice surface similar to playing surface 104 surrounded by lower opaque sideboards, similar to top portion 114. Extending above opaque sideboards, NHL hockey rinks have clear plastic extensions similar to sideboard extensions 118.

[0019] Table hockey game 100 further has a superstructure 124 to hold a scoreboard 126. Not shown in FIG. 1, but shown in FIG. 2. Connections of the superstructure 124 to table-top games are generally known in the art and will not be specifically described herein. Superstructure 124 comprises a plurality of vertical support members 128 extending from stand sidewalls 112 (or top portion 114). Connecting the vertical support members 128 is a crossbar member 130. Crossbar member 130 is coupled to scoreboard 126 in any conventional manner, such as, for example, providing channel through which crossbar member 130 can pass to hold scoreboard 126. Scoreboard 126 is similar to conventional scoreboards generally known in the art. Wires internal to superstructure 124 supply power and other signals to scoreboard 126.

[0020] Scoreboard 126 includes a visitor score display 132, a home score display 134, a light 136, and a time display

138. The displays, which may be more, less, or other displays as a matter of design choice, are generally known in the art and controlled by conventional mechanisms known in the art. For example, the score display is incremented when a switch below opening 308 indicates a game piece scored. The switch, display, and electronics to increment the score are generally known in the art and will not be further explained.

[0021] FIG. 3 shows a goal 300 associated with table hockey game 100. Goal 300 includes a frame 302 and net 304. Frame 302 defines a goalmouth 306. Behind goalmouth 306 an opening 308 exists in playing surface 104. When a game piece crosses goalmouth 306, it falls through opening 308 and exists at a game piece return. Various game piece return systems exist. Internal to opening 308 (generally in a channel below opening 308) resides a switch that is toggled when game piece drops into opening 308. The toggling of the switch sends a signal to scoreboard 126 to increase the respective score display. The signal to scoreboard 126 and switch is generally known in the art. Some table hockey games attempt to simulate actual game conditions by using the signal to generate sound indicative of the roar of a crowd when a

score occurs, see the "833 Patent. The increase in the score and the sound only partially simulates actual game conditions, however. As can be seen, goal 300 includes a goal light 310. As shown, goal light 310 resides on top of frame 302, but could reside on sidewall extensions 118, which more closely resembles actual NHL rinks, but is more difficult to manufacture. Power can be supplied to goal light 310 via wires (not specifically shown) either threaded into net 304 or internal to frame 302.

[0022] As shown in FIG. 4, the signal from the switch is used to trigger a light circuit 402 that closes and supplies power (power can be from a conventional AC plug, a battery, or the like) to goal light 310 to light goal light 310 when a goal is scored. Preferably, the signal trips a switch that closes for a period of time, such as maybe controlled by a simple RC circuit, so goal light 310 is illuminated for several moments after a goal is scored. To better simulate actual NHL rinks, goal light 310 could be a flashing light or siren type light although goal light 310 could be any conventional light. A processor 404 (shown in phantom) could receive indication of a goal and cause light circuit 402 to supply power to goal light 310. After a predetermined time delay, processor 404 would turn off the power

supply. Light circuit 402 and processor 404 could be integrated into a single component.

[0023] While the invention has been particularly shown and described with reference to an embodiment thereof, it will be understood by those skilled in the art that various other changes in the form and details may be made without departing from the spirit and scope of the invention.